LISTING OF CLAIMS

This listing of the claims will replace all prior versions and listing of claims in the application.

1. (Original) A charge transfer-promoting material comprising a material having at least a formula selected from the group consisting of AM, $AM^{n+}X^{-}_{n}$, and $\{A\text{-}R^3\}^{n-}M^{n+}$; wherein A is an organic moiety selected from the group consisting of fused ring radicals having from 2 to 5 rings, inclusive, and derivatives thereof; R^3 is selected from the group consisting of alkoxy silane, carboxylic acid, thiol, amine, phosphine, amide, imine, ester, anhydride, and epoxy, and is covalently attached to A; M is a metal selected from the group consisting of alkali metals, alkaline-earth metals, scandium, yttrium, and metals of lanthanide series; X is a halogen element; and n is an integer number selected from the group consisting of 1, 2, and 3.

2. (Original) A charge transfer-promoting material comprising a material having at least a formula selected from the group consisting of AM, $AM^{n+}X^{-}_{n}$, and $\{A\text{-}R^3\}^{n-}M^{n+}$; wherein A is an organic moiety selected from the group consisting of crown ethers, cryptands, macrocyclic polyamines, and derivatives thereof; R^3 is selected from the group consisting of alkoxy silane, carboxylic acid, thiol, amine, phosphine, amide, imine, ester, anhydride, and epoxy, and is covalently attached to A; M is a metal selected from the group consisting of alkali metals, alkaline-earth metals, scandium, yttrium, and metals of lanthanide series; X is a halogen element; and n is an integer number selected from the group consisting of 1, 2, and 3.

3. (Original) The charge transfer-promoting material of claim 1; wherein A is a fused aromatic ring radical having from 2 to 3 rings, inclusive, and derivatives thereof.

4. (Original) The charge transfer-promoting material of claim 1, wherein M is an alkali metal.

5. (Original) The charge transfer-promoting material of claim 2, wherein A is a crown ether.

6. (Original) The charge transfer-promoting material of claim 2, wherein M is an alkali

metal.

7. (Original) The charge transfer-promoting material of claim 2, comprising potassium triethoxysilylnapthalene.

8. (Original) The charge transfer-promoting material of claim 2, wherein A is 18-crown-6 and M is potassium.

9. (Original) The charge transfer-promoting material of claim 2, comprising a reaction product of compound VIII and potassium fluoride.

10. (Currently amended) An article comprising a first metal and a charge transfer-promoting material ~~according to claim 1~~ disposed on the first metal, wherein the charge transfer-promoting material comprising a material having at least a formula selected from the group consisting of AM, $AM^{n+}X^-_n$, and $\{A\text{-}R^3\}^{n-}M^{n+}$; wherein A is an organic moiety selected from the group consisting of fused ring radicals having from 2 to 5 rings, inclusive, and derivatives thereof; R^3 is selected from the group consisting of alkoxy silane, carboxylic acid, thiol, amine, phosphine, amide, imine, ester, anhydride, and epoxy, and is covalently attached to A; M is a second metal selected from the group consisting of alkali metals, alkaline-earth metals, scandium, yttrium, and metals of lanthanide series; X is a halogen element; and n is an integer number selected from the group consisting of 1, 2, and 3.

11. (Original) The article of claim 10, wherein A is a fused aromatic ring radical having from 2 to 3 rings, inclusive, and derivatives thereof.

12. (Original) The article of claim 10, wherein M is an alkali metal.

13. (Original) The article of claim 10, wherein the charge transfer-promoting material forms a layer on a surface of the first metal.

14. (Original) The article of claim 10, wherein the first metal and the second metal comprise the same metal.

15. (Original) The article of claim 10, wherein the first metal and the second metal are different metals.

16. (Original) The article of claim 10, wherein the first metal is aluminum and the charge transfer-promoting material comprises potassium triethoxysilylnaphthalene.

17. (Currently amended) An article comprising a first metal and a charge transfer-promoting material ~~according to claim 1~~ comprising a material having at least a formula selected from the group consisting of AM, $AM^{n+}X^{-}_{n}$, and $\{A\text{-}R^{3}\}^{n-}M^{n+}$; wherein A is an organic moiety selected from the group consisting of crown ethers, cryptands, macrocyclic polyamines, and derivatives thereof; R^{3} is selected from the group consisting of alkoxy silane, carboxylic acid, thiol, amine, phosphine, amide, imine, ester, anhydride, and epoxy, and is covalently attached to A; M is a second metal selected from the group consisting of alkali metals, alkaline-earth metals, scandium, yttrium, and metals of lanthanide series; X is a halogen element; and n is an integer number selected from the group consisting of 1, 2, and 3 disposed on the first metal.

18. (Original) The article of clam 17, wherein A is a crown ether.

19. (Original) The article of claim 17, wherein M is an alkali metal.

20. (Original) The article of claim 17, wherein the first metal is aluminum and the charge transfer-promoting material has a formula of $AM^{n+}X^{n-}$, wherein A is 18-crown-6, M is potassium, X is fluorine, and n is equal to 1.

21. (Currently amended) An electronic device comprising:

(a) a first electrode;

(b) disposed on the first electrode, a charge transfer-promoting material ~~according to claim 1~~ wherein the charge transfer-promoting material comprising a material having at least a formula selected from the group consisting of AM, $AM^{n+}X^{-}_{n}$, and $\{A\text{-}R^{3}\}^{n-}M^{n+}$; wherein A is an organic moiety selected from the group consisting of fused ring

radicals having from 2 to 5 rings, inclusive, and derivatives thereof; R^3 is selected from the group consisting of alkoxy silane, carboxylic acid, thiol, amine, phosphine, amide, imine, ester, anhydride, and epoxy, and is covalently attached to A; M is a second metal selected from the group consisting of alkali metals, alkaline-earth metals, scandium, yttrium, and metals of lanthanide series; X is a halogen element; and n is an integer number selected from the group consisting of 1, 2, and 3;

(c) at least an electronically active material disposed adjacent to the charge transfer-promoting material; and

(d) a second electrode disposed adjacent to the electronically active material.

22. (Original) The electronic device of claim 21; wherein the electronically active material is an organic electroluminescent ("EL") material; the first electrode comprises a material selected from the group consisting of K, Li, Na, Mg, Ca, Sr, Ba, Al, Ag, In, Sn, Zn, Zr, Sc, Y, elements of lanthanide series, alloys thereof, and mixtures thereof;

23. (Original) The electronic device of claim 22, wherein the first electrode comprises aluminum.

24. (Original) The electronic device of claim 21; wherein the electronically active material is an organic EL material and is selected from the group consisting of poly(n-vinylcarbazole) ("PVK"), polyfluorene, poly(alkylfluorene), poly(praraphenylene), poly(p-phenylene vinylene), polysilanes, polythiophene, poly(2,5-thienylene vinylene), poly(pyridine vinylene), polyquinoxaline, polyquinoline, 1,3,5-tris{n-(4-diphenylaminophenyl) phenylamino}benzene, phenylanthracene, tetraarylethene, coumarin, rubrene, tetraphenylbutadiene, anthracene, perylene, coronene, and derivatives thereof.

25. (Original) The electronic device of claim 21; wherein the electronically active material is an organic EL material and is selected from the group consisting of aluminum-acetylacetonate, gallium-acetylacetonate, and indium-acetylacetonate, aluminum-(picolymethylketone)-bis{2,6-di(t-butyl)phenoxide}, scandium-(4-methoxy-picolylmethylketone)-bis(acetylacetonate), organo-metalic

complexes of 8-hydroxyquinoline, and derivatives of organo-metalic complexes of 8-hydroxyquinoline.

26. (Original) The electronic device of claim 21, wherein the second electrode comprises a metal oxide selected from the group consisting of indium tin oxide ("ITO"), tin oxide, indium oxide, zinc oxide, indium zinc oxide, zinc indium tin oxide, antimony oxide, and mixtures thereof.

27. (Original) The electronic device of claim 21, wherein the electronically active material is an organic EL material, and the electronic device further comprises a photoluminescent ("PL") material disposed in a path of light emitted by the organic EL material.

28. (Original) The electronic device of claim 21, wherein the electronic device is a photovoltaic ("PV") cell, and the electronically active material is a PV material.

29. (Original) The electronic device of claim 28, wherein the PV material comprises an electron-accepting material and an electron-donating material disposed adjacent to each other, and the charge transfer-promoting material is disposed adjacent to the electron-donating material.

30. (Currently amended) An electronic device comprising:

(a) a first electrode;

(b) a second electrode; and

(c) at least an electronically active material disposed between the first electrode and the second electrode; said at least an electronically active material being doped with a charge transfer-promoting material ~~according to claim 1~~ comprising a material having at least a formula selected from the group consisting of AM, $AM^{n+}X^{-}_{n}$, and $\{A\text{-}R^{3}\}^{n}M^{n+}$; wherein A is an organic moiety selected from the group consisting of fused ring radicals having from 2 to 5 rings, inclusive, and derivatives thereof; R^{3} is selected from the group consisting of alkoxy silane, carboxylic acid, thiol, amine, phosphine, amide, imine, ester, anhydride, and

epoxy, and is covalently attached to A; M is a second metal selected from the group consisting of alkali metals, alkaline-earth metals, scandium, yttrium, and metals of lanthanide series; X is a halogen element; and n is an integer number selected from the group consisting of 1, 2, and 3.

31. (Original) The electronic device of claim 30; wherein the electronically active material is an organic EL material; the first electrode comprises a material selected from the group consisting of K, Li, Na, Mg, Ca, Sr, Ba, Al, Ag, In, Sn, Zn, Zr, Sc, Y, elements of lanthanide series, alloys thereof, and mixtures thereof.

32. (Original) The electronic device of claim 30; wherein the electronically active material is an organic EL material and is selected from the group consisting of poly(n-vinylcarbazole) ("PVK"), polyfluorene, poly(alkylfluorene), poly(praraphenylene), poly(p-phenylene vinylene), polysilanes, polythiophene, poly(2,5-thienylene vinylene), poly(pyridine vinylene), polyquinoxaline, polyquinoline, 1,3,5-tris{n-(4-diphenylaminophenyl) phenylamino}benzene, phenylanthracene, tetraarylethene, coumarin, rubrene, tetraphenylbutadiene, anthracene, perylene, coronene, and derivatives thereof.

33. (Original) The electronic device of claim 30; wherein the electronically active material is an organic EL material and is selected from the group consisting of aluminum-acetylacetonate, gallium- acetylacetonate, and indium-acetylacetonate, aluminum-(picolymethylketone)-bis{2,6-di(t-butyl)phenoxide}, scandium-(4-methoxy-picolylmethylketone)-bis(acetylacetonate), organo-metalic complexes of 8-hydroxyquinoline, and derivatives of organo-metalic complexes of 8-hydroxyquinoline.

34. (Original) The electronic device of claim 30, wherein the second electrode comprises a metal oxide selected from the group consisting of indium tin oxide, tin oxide, indium oxide, zinc oxide, indium zinc oxide, zinc indium tin oxide, antimony oxide, and mixtures thereof.

35. (Original) The electronic device of claim 30, wherein the electronically active material is an organic EL material, and the electronic device further comprises a photoluminescent material disposed in a path of light emitted by the organic EL material.

36. (Original) The electronic device of claim 30; wherein the electronic device is a PV cell, the electronically active material comprises an electron-accepting material and an electron-donating material disposed adjacent to each other, and the charge transfer-promoting material is doped into the electron-donating material.

37. (Original) The electronic device of claim 30, wherein both the first electrode and the second electrode comprise a substantially transparent, electrically conducting material.

38. (Currently amended) An electronic device comprising:

(a) a first electrode;

(b) a charge transfer-promoting material disposed on the first electrode, the charge transfer-promoting material ~~according to claim 1~~ comprising a material having at least a formula selected from the group consisting of AM, $AM^{n+}X^{-}_{n}$, and $\{A\text{-}R^{3}\}^{n}\text{-}M^{n+}$; wherein A is an organic moiety selected from the group consisting of crown ethers, cryptands, macrocyclic polyamines, and derivatives thereof; R^{3} is selected from the group consisting of alkoxy silane, carboxylic acid, thiol, amine, phosphine, amide, imine, ester, anhydride, and epoxy, and is covalently attached to A; M is a second metal selected from the group consisting of alkali metals, alkaline-earth metals, scandium, yttrium, and metals of lanthanide series; X is a halogen element; and n is an integer number selected from the group consisting of 1, 2, and 3;

(c) at least an electronically active material disposed adjacent to the charge transfer-promoting material; and

(d) a second electrode disposed adjacent to the electronically active material.

39. (Currently amended) An electronic device comprising:

(a) a first electrode;

(b) a second electrode; and

(c) at least an electronically active material disposed between the first electrode and the second electrode; said at least an electronically active material being doped with a charge transfer-promoting material ~~according to claim 1~~ comprising a material having at least a formula selected from the group consisting of AM, $AM^{n+}X^{-}_{n}$, and $\{A\text{-}R^{3}\}^{n-}M^{n+}$; wherein A is an organic moiety selected from the group consisting of crown ethers, cryptands, macrocyclic polyamines, and derivatives thereof; R^3 is selected from the group consisting of alkoxy silane, carboxylic acid, thiol, amine, phosphine, amide, imine, ester, anhydride, and epoxy, and is covalently attached to A; M is a second metal selected from the group consisting of alkali metals, alkaline-earth metals, scandium, yttrium, and metals of lanthanide series; X is a halogen element; and n is an integer number selected from the group consisting of 1, 2, and 3.

Claims 40 – 69 Canceled

70. (NEW) An article comprising a first metal and a charge transfer-promoting material comprising a material having at least a formula selected from the group consisting of AM, $AM^{n+}X^{-}_{n}$, and $\{A\text{-}R^{3}\}^{n-}M^{n+}$; wherein A is an organic moiety selected from the group consisting of fused ring radicals having from 2 to 5 rings, inclusive, crown ethers, cryptands, macrocyclic polyamines, and derivatives thereof; R^3 is selected from the group consisting of alkoxy silane, carboxylic acid, thiol, amine, phosphine, amide, imine, ester, anhydride, and epoxy, and is covalently attached to A; M is a second metal selected from the group consisting of alkali metals, alkaline-earth metals, scandium, yttrium, and metals of lanthanide series; X is a halogen element; and n is an integer number selected from the group consisting of 1, 2, and 3 disposed on the first metal.